Date: Sun, 26 Jun 94 04:30:10 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #200
To: Ham-Ant

Ham-Ant Digest Sun, 26 Jun 94 Volume 94 : Issue 200

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: Tue, 21 Jun 1994 20:14:21 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!news.dtc.hp.com!hplextra!hpwrce!
tonyz@network.ucsd.edu
Subject: antenna tower erection
To: ham-ant@ucsd.edu

I just was listening on the 40 meter wavelength to a conversation
about a friend of someone's who was affiliated in some manner
(one-time section manager or something) to the ARRL. He was up on
his tower working on something and somehow his safety belt got
hung up. Don't ask me how, I guess its possible with what might
be going on at the top of a tower....but the gentleman apparently
couldn't get free of his situation and released his safety belt
whereupon he fell freefalling to the top of his house and then
bounced off the roof, onto the pavement on his driveway. The poor
fellow is in a wheelchair and not expected to be able to walk
around anymore. His friend on the radio said that it's too bad
because the guy was very active.

Just more to think about..even with a safety belt and years of
experience climbing towers and being part of tower raising parties,
all it takes is one fall.

Definitely try to get help from some local guys before doing
something like raising a tower!

73's Tony

Date: 25 Jun 1994 10:36:33 GMT
From: ihnp4.ucsd.edu!agate!spool.mu.edu!news.clark.edu!netnews.nwnet.net!
news.u.washington.edu!popllama@network.ucsd.edu
Subject: A Question on Yagi's.
To: ham-ant@ucsd.edu

Ok, so I have come to the conclusion that a Yagi is the more or less best
design for a specific frequency when pulling in a distant station. So here's
my question on a Yagi. I need one tuned for 89.9FM. What would the lengths
be for a Yagi then for that frequency? Which end is pointed towards the
station, the narrow or the wide? What would be an "optimum" number of
dipoles to put on a Yagi? Or is there even such a thing?

I realize that the poles are all of different lengths, and different spacing
between each pole. How can I calculate these lengths?

popllama@stein.u.washington.edu

Date: Sat, 25 Jun 1994 16:32:37 GMT
From: ihnp4.ucsd.edu!usc!crash!olivehill!jtara@network.ucsd.edu
Subject: A Question on Yagi's.
To: ham-ant@ucsd.edu

In article <2uh1bh$lb4@news.u.washington.edu> popllama@u.washington.edu (Alec
Muzzy) writes:
>From: popllama@u.washington.edu (Alec Muzzy)
>Subject: A Question on Yagi's.
>Date: 25 Jun 1994 10:36:33 GMT

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>popllama@stein.u.washington.edu

Oh, a couple more comments on circularly-polarized antennas. There are various types of these, but the one I am thinking looks a lot like a Yagi, but consists of loops rather than poles. It somewhat like a "quad" antenna, which is composed of square loops, (and I beleive is also circularly polarized). I beleive that whether it's a "quad" or a "loop" is primarly determined by which construction technique is easier at the frequency that the antenna is built for.

There also are some bizarre antennas that consist of a single spiral, but again (like the coat-hanger technique) most easily done at higher frequencies than this.

Jon Tara|Internet: jtara@crash.cts.com | My child was Kibo of the
        |CompuServe: 76477,3422 | month at Usenet Middle
        | | School!

Date: Sat, 25 Jun 1994 16:28:36 GMT
From: ihnp4.ucsd.edu!usc!crash!olivehill!jtara@network.ucsd.edu
Subject: A Question on Yagi's.
To: ham-ant@ucsd.edu

In article <2uh1bh$lb4@news.u.washington.edu> popllama@u.washington.edu (Alec Muzzy) writes:
>From: popllama@u.washington.edu (Alec Muzzy)
>Subject: A Question on Yagi's.
>Date: 25 Jun 1994 10:36:33 GMT

>Ok, so I have come to the conclusion that a Yagi is the more or less best
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>dipoles to put on a Yagi? Or is there even such a thing?

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>between each pole. How can I calculate these lengths?

Go to a store that sells ham radio equipment and pick up a book on VHF antennas. (I beleive that the ARRL publishes such a book - I have one

somewhere.)

There is only one dipole. There is normally one set of "directors" in the front, and multiple "reflectors" in the back. The short end points toward the station. The director is shorter than the dipole, and each set of reflectors is successivly longer. There is no "optimum" number - each reflector successivly narrows the beam width, increasing the gain. 22 elements is a popular "large" number of elements, but you can have more.

You're probably better off just buying a commerical FM antenna, which will be typically cut for the center of the band. A better one will have adjustable elements, which you can tune to the specific frequency, though for reception it won't make a heck of a lot of difference over the bandwidth of the FM band. (The primary reason for *exact* tuning is in transmission, where a mis-match can cause over-heating of the final output stage. Yes, there is some loss, but the potential damange of a mis-match is usually of more interest than the loss over a small frequency range.)

There are many other antenna designs that would be suitable, however. For example, since FM signals are polarized in both directions (horizontal and vertical) a circularly-polarized antenna may give you better performance, since it will pick up BOTH components of the wave. I've seen these done with a broomsticks and coat hangers (don't laugh!) at higher frequencies (say, 400 mHz or so) but I think the size in the FM broadcast band would preclude this construction.

____
Jon Tara|Internet: jtara@crash.cts.com | My child was Kibo of the
        |CompuServe: 76477,3422 | month at Usenet Middle
        | | School!

Date: Sun, 26 Jun 1994 06:17:29 GMT
From: get.hooked.net!news.sprintlink.net!crash!olivehill!jtara@decwrl.dec.com
Subject: A Question on Yagi's.
To: ham-ant@ucsd.edu

In article <jtara.485.2E0C5B34@cts.com> jtara@cts.com (Jon Tara) writes:
>There is only one dipole. There is normally one set of "directors" in the
>front, and multiple "reflectors" in the back. The short end points toward the
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>is successivly longer. There is no "optimum" number - each reflector
>successivly narrows the beam width, increasing the gain. 22 elements is a
>popular "large" number of elements, but you can have more.

Oops, I goofed, and should have known better too: there is one set of
reflectors, and multiple sets of directors.

(Thanks to mzenier@eskimo.com (Mark Zenier) for pointing this out.)

Jon Tara|Internet: jtara@crash.cts.com | My child was Kibo of the
        |CompuServe: 76477,3422 | month at Usenet Middle
        | | School!

Date: Mon, 20 Jun 1994 01:00:00 -0600
From: conch!gruntwork.sps.mot.com!oakhill!val!afarm!fredmail@uunet.uu.net
Subject: Railroad Track As An Ant
To: ham-ant@ucsd.edu

On 16 Jun 94 07:54am, STORM JAMES wrote to All:

 SJ> I have heard a legend that a college radio station (either at MIT,
 SJ> Tufts, or Swarthmore) welded antenna to railroad tracks, and peeved the
 SJ> FCC by broadcasting nationwide. Is this true? If anyone knows, please
 SJ> email me (or post here) If you do know, could you please direct me to
 SJ> some documentation regarding this legend if you can.

  NEVER, EVER TAMPER WITH RAILROAD TRACK CIRCUITS.
  ****

 There are some employees of the railroads called Special Agents ie. police.
 If they catch you tampering with the tracks, signals or circuits in any way,
 they will charge you with "Interfering with the operation of a railroad".
 This is not a nice thing to be charged with!

 A person tampered with the track signals a few years ago and caused a Amtrak
 train to crash head-on into some freight cars on a side track. Several
 people were killed plus a few million $'s in property and equipment damage.
 This persons new QTH for the next 17 years is "CLUB FED", he owes the
 railroad several million $'s for property and equipment damage, and the
 surviving family members filed wrongful death lawsuits against him.

 Do not fool around with railroad equipment, Special Agents have absolutely
 no humor about this kind of thing.

              Gregory < KB5YKO >

... .

Date: 25 Jun 1994 09:58:09 -0400
From: ihnp4.ucsd.edu!swrinde!emory!europa.eng.gtefsd.com!news.ans.net!
newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@network.ucsd.edu
Subject: seek old CDR rotor (or replacement)
To: ham-ant@ucsd.edu

In article <362@ddlgw.UUCP>, ddl@harvard.edu (Dan Lanciani) writes:

Dan: The Ham M line is now sold by Telix/Hygain. Any of the older
HamM
models should fit the mount, all used a 4 bolt mounting
configuration. You can
buy used, rebuilt Ham M motors from C.A.T.S in Pemberville, Ohio.
Craig's phone number is (419)352-4465. If you have the motor out of
the tower, Craig
rebuilds them for $50 plus any needed parts. They're better than new
when done. 73, Jim, W9WU

End of Ham-Ant Digest V94 #200
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